

Preliminary Amendment and
Response to Restriction Requirement
Application No. 09/654,182

16. ⁴ (Amended) The chromatography column of claim 1, wherein the organic group is a phenyl or naphthyl group having ionic or ionizable groups.

17. ⁷ (Amended) The chromatography column of claim 1, wherein the organic group comprises an amino acid or derivatized amino acid, cyclodextrin, immobilized protein, polypeptides, or combinations thereof.

18. ¹⁰ (Amended) The chromatography column of claim 1, wherein the organic group comprises a $-C_6F_5$ group, a trifluoromethyl-phenyl group, a bis-trifluorophenyl group, or combinations thereof.

al 19. ¹³ (Amended) The chromatography column of claim 1, wherein the organic group comprises $-Ar-(C_nH_{2n+1})_x$ group, wherein n is an integer of from about 1 to about 30 and x is an integer of from about 1 to about 3.

20. ¹⁶ (Amended) The chromatography column of claim 1, wherein the organic group comprises cyclodextrin attached through an alkyl group.

21. ¹⁹ (Amended) The chromatography column of claim 1, wherein the organic group comprises polyethylene glycol or methoxy-terminated polyethylene glycol or derivatized resins thereof.

22. ²² (Amended) The chromatography column of claim 1, wherein the organic group comprises $-Ar-((C_nH_{2n})COOX)_m$, wherein Ar is an aromatic group, n is 0 to 20, m is 1 to 3, and X is H, a cation, or an organic group.

23. ²⁵ (Amended) The chromatography column of claim 1, wherein the organic group comprises $Ar-((C_nH_{2n})OH)_m$, wherein Ar is an aromatic group, n is 0 to 20, m is 1 to 3.

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~~24.~~ ²⁸ (Amended) The chromatography column of claim 1, wherein the organic group comprises $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{NH}_2)_m$, wherein n is 0 to 20, m is 1 to 3, or its protonated form: $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{NH}_3\text{X})_m$, wherein X is an ion, and Ar is an aromatic group.

~~25.~~ ³¹ (Amended) The chromatography column of claim 1, wherein the organic group comprises $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{CHNH}_3^+\text{COO}^-)_m$ and the reaction products thereof with molecules containing functional groups terminated in $-\text{NH}_2$, $-\text{OH}$, or $-\text{COOH}$, wherein Ar is an aromatic group and n is 0 to 20.

91 ~~26.~~ ³⁴ (Amended) The chromatography column of claim 1, wherein the organic group comprises $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{CH}=\text{CH}_2)_m$, wherein n is 0 to 20, m is 1 to 3 or $-\text{Ar}-((\text{C}_n\text{H}_{2n})\text{SO}_2\text{CH}=\text{CH}_2)_m$, where n is 0 to 20 and m is 1 to 3.

~~27.~~ ³⁷ (Amended) The chromatography column of claim 1, wherein the organic group comprises at least one chiral ligand group.

~~28.~~ ⁵ (Amended) The chromatography column of claim ~~16~~ ⁴, further comprising a second organic group attached on the carbonaceous material.

~~29.~~ ⁸ (Amended) The chromatography column of claim ~~17~~ ⁷, further comprising a second organic group attached on the carbonaceous material.

~~30.~~ ¹¹ (Amended) The chromatography column of claim ~~18~~ ¹⁰, further comprising a second organic group attached on the carbonaceous material.

~~31.~~ ¹⁴ (Amended) The chromatography column of claim ~~19~~ ¹³, further comprising a second organic group attached on the carbonaceous material.

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~~32.~~¹⁷ (Amended) The chromatography column of claim ~~20~~¹⁶, further comprising a second organic group attached on the carbonaceous material.

~~33.~~²⁰ (Amended) The chromatography column of claim ~~21~~¹⁹, further comprising a second organic group attached on the carbonaceous material.

~~34.~~²³ (Amended) The chromatography column of claim ~~22~~²², further comprising a second organic group attached on the carbonaceous material.

~~35.~~²⁶ (Amended) The chromatography column of claim ~~23~~²⁵, further comprising a second organic group attached on the carbonaceous material.

~~36.~~²⁹ (Amended) The chromatography column of claim ~~24~~²⁸, further comprising a second organic group attached on the carbonaceous material.

~~37.~~³² (Amended) The chromatography column of claim ~~25~~³¹, further comprising a second organic group attached on the carbonaceous material.

~~38.~~³⁵ (Amended) The chromatography column of claim ~~26~~³⁴, further comprising a second organic group attached on the carbonaceous material.

~~39.~~⁶ (Amended) The chromatography column of claim ~~28~~⁵, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

~~40.~~⁹ (Amended) The chromatography column of claim ~~29~~⁸, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

~~41.~~¹² (Amended) The chromatography column of claim ~~30~~¹¹, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

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~~42.~~¹⁵ (Amended) The chromatography column of claim ~~31~~¹⁴, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

~~43.~~¹⁸ (Amended) The chromatography column of claim ~~32~~¹⁷, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

~~44.~~²¹ (Amended) The chromatography column of claim ~~33~~²⁰, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

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~~45.~~²⁴ (Amended) The chromatography column of claim ~~34~~²³, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

~~46.~~²⁷ (Amended) The chromatography column of claim ~~35~~²⁶, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

~~47.~~³⁰ (Amended) The chromatography column of claim ~~36~~²⁹, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

~~48.~~³³ (Amended) The chromatography column of claim ~~37~~³², wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.

~~49.~~³⁶ (Amended) The chromatography column of claim ~~38~~³⁵, wherein said second organic group has a shorter chain length or less steric hindrance than said organic group.
